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(54) **EXPOSURE APPARATUS AND EXPOSURE METHOD THEREOF**

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(56)

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(57)

ABSTRACT

A wafer alignment system is provided for performing a uni-directional scan-exposure. The wafer alignment system includes a plurality of wafer stages successively moving from a first position to a second position of a base cyclically. The wafer alignment method also includes an encoder plate having a first opening and a second opening. Further, the wafer alignment system includes a plurality of encoder plate readers and a plurality of wafer stage fiducials on the wafer stages. Further, the wafer alignment system also includes an alignment detection unit above the first opening of the encoder plate.

15 Claims, 9 Drawing Sheets

